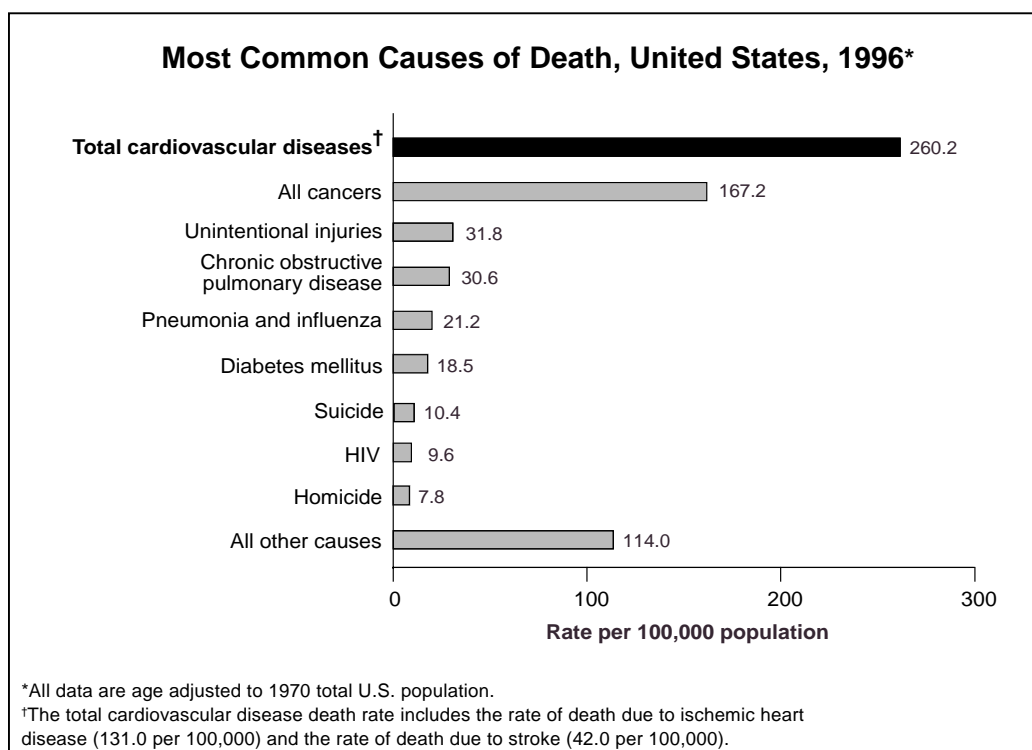


# Preventing Cardiovascular Disease: Addressing the Nation's Leading Killer

## AT-A-GLANCE 2000



*"We have the scientific knowledge to create a world in which most cardiovascular disease could be eliminated. In such a world, preventive practices would be incorporated early in life as a matter of course; everyone would have access to positive healthy living, smoke-free air, good nutrition, regular physical activity, and supportive living and working environments."*

The Victoria Declaration on Heart Health, 1992



**U.S. DEPARTMENT OF HEALTH AND HUMAN SERVICES**  
Centers for Disease Control and Prevention



## Cardiovascular Disease: The Nation's Leading Killer

Among both men and women, and across all racial and ethnic groups, cardiovascular disease is our nation's leading killer. The term "cardiovascular disease" refers to a variety of diseases and conditions affecting the heart and blood vessels, principally high blood pressure, heart disease, and stroke. About 960,000 Americans die of cardiovascular disease each year, accounting for more than 40% of all deaths.

Although cardiovascular disease is often thought to primarily affect men and older people, it is a major killer of women and people in the prime of life. More than half of all cardiovascular disease deaths each year occur among women. This disease is the leading cause of death among Americans in middle age, killing more than 160,000 people between the ages of 35 and 64 each year. In addition, the rate of premature deaths due to cardiovascular disease is greater among black than among white Americans.

### Deaths Only Part of the Picture

A consideration of deaths alone severely understates the burden of cardiovascular disease. About 58 million Americans (almost one-fourth of the nation's population) live with some form of this disease.

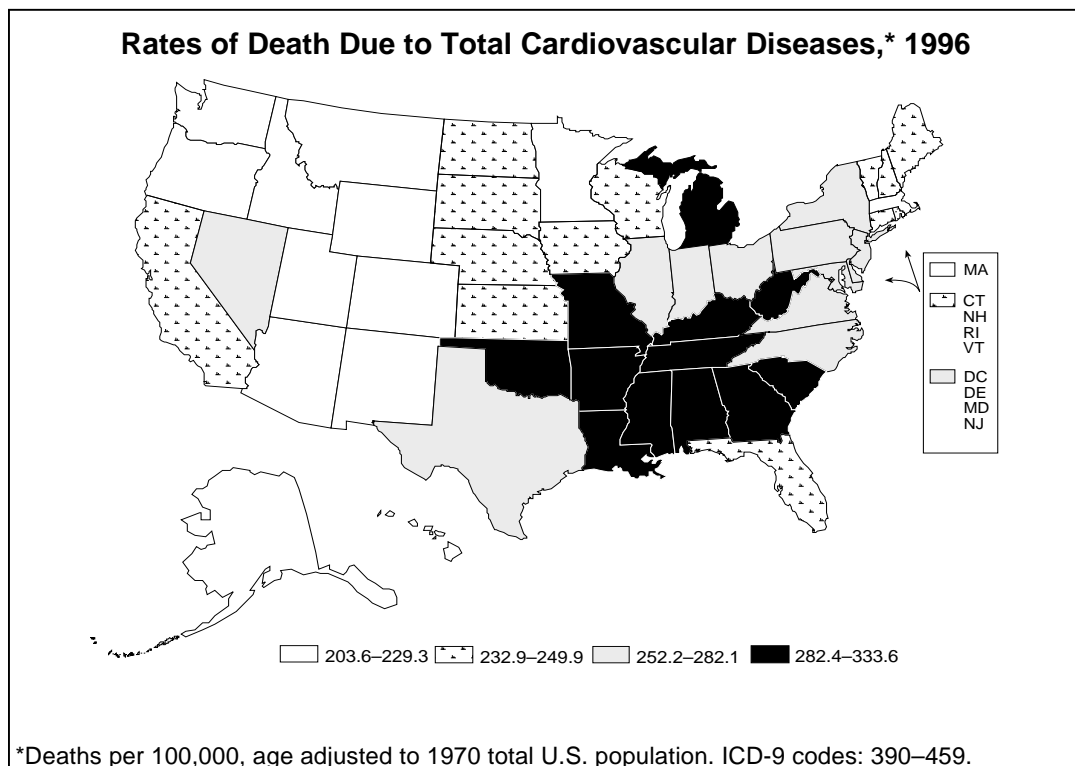
Heart disease is the leading cause of permanent

**E**liminating cardiovascular disease would increase life expectancy by almost 10 years.

disability among working adults. Stroke alone accounts for disability among more than 1 million people nationwide. Almost 6 million hospitalizations each year are due to cardiovascular disease. Congestive heart failure, one form of cardiovascular disease, is the single most frequent cause of hospitalization among people aged 65 years or older.

### Health Burden Rivalled by Economic Burden

The economic burden of cardiovascular disease has a profound impact on the U.S. health care system, and this burden continues to grow as the population ages. The estimated cost of cardiovascular disease in the United States in 1999 was \$287 billion. This figure includes health expenditures and lost productivity resulting from illness and death. The use of expensive treatment, while often effective in delaying death from cardiovascular disease, is likely to continue to increase the financial impact of this disease on the nation.



## Risk Behaviors Are Largely Responsible

A limited number of health-related behaviors practiced by people every day contribute markedly to cardiovascular disease.

### Tobacco Use

Cigarette smoking is a major cause of heart disease among both men and women. Smokers have twice the risk for heart attack of nonsmokers. Nearly one-fifth of all deaths from heart disease, or about 180,000 deaths each year, are attributable to smoking. Every day, more than 3,000 young people become regular smokers.

### Lack of Physical Activity

Physical activity reduces the risk for heart disease and helps reduce blood pressure in people who already have high blood pressure. People who are sedentary have twice the risk for heart disease of those who are physically active. However, more than half of American adults do not achieve the recommended level of physical activity, and more than one-fourth report no leisure-time physical activity.

## CDC's National Leadership

CDC has provided leadership in developing *Preventing Death and Disability from Cardiovascular Diseases: A State-Based Plan for Action*, a plan to ensure that every state is part of a comprehensive, integrated national program to prevent cardiovascular disease and target its major risk factors.

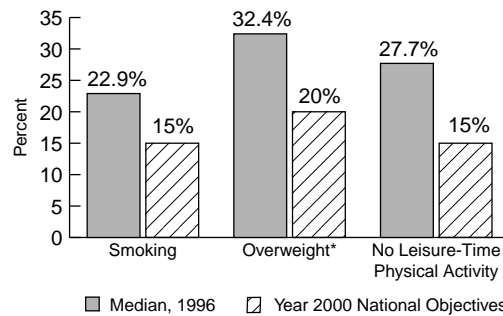
### Establishing a Nationwide Prevention Program

With fiscal year 2000 funding of about \$25 million, CDC will assist up to 13 states in building capacity to target cardiovascular disease and will support comprehensive programs in up to five states.

To support state-based programs, CDC is working with key partners such as the American Heart Association to establish critical national elements, including

- A multifaceted health communications effort that includes supporting state-based media campaigns that promote healthy behavior choices.
- Assistance from CDC's National Standards Laboratory to improve state laboratory capacity.

### Behavioral Risk Factors for Cardiovascular Disease Among U.S. Adults



\*Body mass index  $\geq 27.8$  kg/m<sup>2</sup> for men and  $\geq 27.3$  kg/m<sup>2</sup> for women.  
Source: CDC, Behavioral Risk Factor Surveillance System, 1998.

### Poor Nutrition

Overweight and obesity among U.S. adults have dramatically increased in the past decade. People who are overweight or obese have a higher risk for heart disease, high blood pressure, high cholesterol, and other chronic diseases and conditions. Only 18% of women and 20% of men report eating five servings of fruits and vegetables each day.

### Examples of Comprehensive Cardiovascular Disease Program Activities

- Through CDC's cardiovascular disease program, the New York State Department of Health and dairy industry professionals launched a 9-week campaign to increase the consumption of low-fat milk. The campaign, which included television and radio commercials, a campaign kick-off covered by local media, and milk taste tests in grocery stores and schools, resulted in a marked increase in low-fat and overall milk sales.
- With funding from CDC's cardiovascular disease program, the North Carolina Department of Health and Human Services has developed a guidebook and training materials for public health professionals and biking and walking enthusiasts. The project focuses on methods for collecting and using data on the suitability of local roads to advocate for policies that support bicycling and walking.

- ## Strengthening the Science Base

CDC's National Standards Laboratory is a state-of-the-art facility that supports research to better define the relationship between levels of cholesterol and other related lipids and the risk of developing heart disease. This laboratory has established national reference standards for cholesterol measurement that are used by laboratories around the country.

In fiscal year 2000, CDC supports at least 24 Prevention Research Centers at schools of public health and medical schools to develop and evaluate promising cost-effective prevention strategies that can be readily applied in community settings. These centers serve as the focal points for targeting such issues as increasing physical activity among the elderly, reducing risk factors for heart disease among urban minority populations, and promoting health in the workplace.

CDC has collaborated with national partners to develop a health communications campaign promoting heart-healthy behaviors. In doing so, CDC has taken advantage of expertise from the field of social marketing to strengthen and fine-tune health promotion messages.

To encourage health promotion among children, CDC has consulted with scientific, health, and education experts to develop guidelines for use by schools and other organizations serving young people. These guidelines, covering topics such as tobacco use, unhealthy eating, and physical inactivity, provide specific recommendations for effectively promoting healthy behaviors.



## Targeting Risk Factors

### Improving Women's Health

Cardiovascular disease is the leading cause of death among women. Furthermore, women are often diagnosed with cardiovascular disease in its advanced stages, when treatment is less effective. In fiscal year 2000, CDC supports at least six states to screen women for factors that significantly increase their risk for cardiovascular disease, including sedentary lifestyle, obesity, elevated cholesterol, high blood pressure, and smoking. This screening, conducted through CDC's WISEWOMAN program, has been provided to more than 8,500 low-income and uninsured women aged 50 years or older, along with counseling, education, referral, and follow-up services. As part of the Women's Health Initiative, CDC collaborates with the National Institutes of Health to fund church and community-based interventions to reduce risk behaviors among African-American women. The goal of programs such as Project Joy in Maryland and the Uniontown Project in Alabama is to create model risk reduction programs that can be implemented in communities throughout the nation. In addition, CDC has funded the Women's Cardiovascular Health Network since 1997 to identify and disseminate information about successful intervention programs that promote cardiovascular health among women and to design culturally appropriate physical activity programs for women, particularly for those with a disproportionate burden of cardiovascular disease.

### Targeting Tobacco Use in States

To reduce the prevalence of tobacco use, CDC supports and coordinates tobacco use prevention and control programs in all 50 states and the District of Columbia. These programs include strategic activities designed to reach those most at risk, including young people, members of racial and ethnic minority groups, women, and people with low socioeconomic status.

### Addressing the Risk for Heart Disease and Stroke Among People With Diabetes

People with diabetes are two to four times more likely to have heart disease or stroke than people without diabetes. As part of its national strategy to address the

**S**tudies have shown that people can reduce their risk for cardiovascular disease by modifying their behavior. For example, people who stop smoking reduce their risk for heart disease rapidly and substantially. Improved nutrition and physical activity help to control high blood pressure and reduce obesity.

burden of diabetes, CDC provides resources and technical assistance to state health departments, national organizations, and communities to

- Determine the size and nature of diabetes-related problems and the reasons they exist.
- Develop and evaluate new strategies for diabetes prevention.
- Establish partnerships to prevent diabetes problems.
- Increase access to quality diabetes care to improve the prevention, detection, and treatment of diabetes complications.

### Investing in Our Children's Future

Although cardiovascular disease usually becomes evident in middle or older age, progressive harmful conditions such as atherosclerosis that lead to such disease begin in childhood. Reducing the burden of cardiovascular disease in the United States largely depends on reaching young people early, before unhealthy behaviors are adopted.

CDC provides 22 states with the resources needed to build the state infrastructure to support high-quality, coordinated school health programs. These programs give young people the information and skills they need to avoid health risks such as tobacco use, unhealthy dietary patterns, and inadequate physical activity. School health education gives young people the opportunity to practice decision-making, communication, and peer-resistance skills that will enable them to make healthy behavior choices.

## Surveillance Provides Vital Information

National and state-based surveillance is essential to support successful cardiovascular disease prevention efforts.

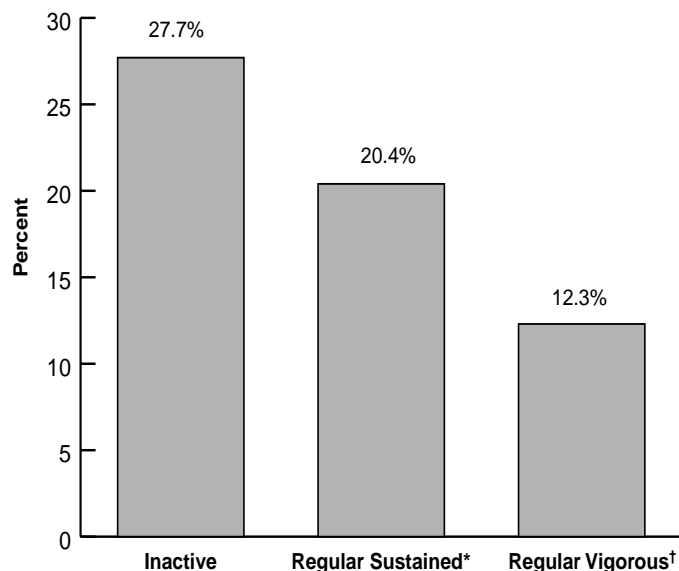
### Measuring the Disease Impact

CDC has developed chronic disease surveillance reports—such as the recently updated *Chronic Diseases and Their Risk Factors: The Nation's Leading Causes of Death*—that provide extensive state-based information on the burden of cardiovascular disease and the prevalence of associated risk factors. CDC has also developed more detailed monographs to highlight the health and economic burden of cardiovascular disease in specific populations. For example, *Women and Heart Disease, An Atlas of Racial and Ethnic Disparities in Mortality* presents, for the first time, county-level maps of heart disease among women and maps showing the geographic patterns of local economic and medical care resources, the social isolation of women, and population distributions for each of the five largest racial and ethnic groups. This atlas provides the information needed to identify communities of women at greatest risk for heart disease and to tailor heart disease prevention efforts to those communities. A similar atlas for heart disease among men will be released in 2000.

### Essential Information on Risk Factors

CDC's state-based Behavioral Risk Factor Surveillance System (BRFSS) is a unique source of information on behaviors that put Americans at higher risk for cardiovascular disease. Now active in all 50 states, this system gathers information from adults on knowledge, attitudes, and behaviors related to key health issues, such as tobacco use, dietary patterns, levels of leisure-time physical activity, and use of preventive services. Information from the BRFSS enables CDC and the states to better target scarce health resources by determining the prevalence of risk behaviors and the populations most at risk.

**Median Levels of Leisure-Time Physical Activity Among U.S. Adults**



\*Regular Sustained—30 minutes of any intensity 5 times per week.

†Regular Vigorous—20 minutes of vigorous intensity 3 times per week.

Source: CDC, Behavioral Risk Factor Surveillance System, 1998.

### Information to Better Target Prevention Among Young People

Until the 1990s, little was known about the prevalence of behaviors among young people that increase their risk for cardiovascular disease in their middle or later years. The Youth Risk Behavior Surveillance System, developed by CDC in cooperation with federal, state, and private-sector partners, now provides such information. This surveillance system includes voluntary surveys conducted by CDC among a national sample of 12,000 students as well as smaller surveys conducted by state and local education agencies every 2 years. The information collected on the prevalence of key cardiovascular disease risk factors—tobacco use, lack of physical activity, and poor nutrition—is crucial in targeting health promotion efforts to young people.

**For more information or additional copies of this document, please contact the  
Centers for Disease Control and Prevention,  
National Center for Chronic Disease Prevention and Health Promotion, Mail Stop K-13,  
4770 Buford Highway NE, Atlanta, GA 30341-3717, (770) 488-5080.  
ccdinfor@cdc.gov  
<http://www.cdc.gov/nccdphp>**